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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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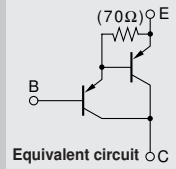
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# Darlington

# 2SB1587



**Silicon PNP Epitaxial Planar Transistor** (Complement to type 2SD2438)

**Application :** Audio, Series Regulator and General Purpose

**Absolute maximum ratings** (Ta=25°C)

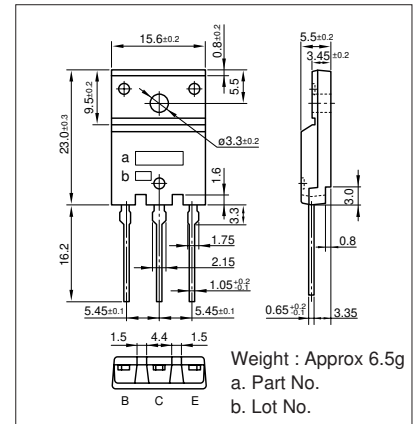
Symbol	Ratings	Unit
V <sub>CB0</sub>	-160	V
V <sub>CE0</sub>	-150	V
V <sub>E0</sub>	-5	V
I <sub>c</sub>	-8	A
I <sub>B</sub>	-1	A
P <sub>c</sub>	75(T <sub>c</sub> =25°C)	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

**Electrical Characteristics** (Ta=25°C)

Symbol	Conditions	Ratings	Unit
I <sub>CB0</sub>	V <sub>CB</sub> =-160V	-100max	μA
I <sub>E0</sub>	V <sub>EB</sub> =-5V	-100max	μA
V <sub>(BR)CEO</sub>	I <sub>c</sub> =-30mA	-150min	V
hFE	V <sub>CE</sub> =-4V, I <sub>c</sub> =-6A	5000min*	
V <sub>CE(sat)</sub>	I <sub>c</sub> =-6A, I <sub>B</sub> =-6mA	-2.5max	V
V <sub>BE(sat)</sub>	I <sub>c</sub> =-6A, I <sub>B</sub> =-6mA	-3.0max	V
f <sub>T</sub>	V <sub>CE</sub> =-12V, I <sub>E</sub> =1A	65typ	MHz
C <sub>OB</sub>	V <sub>CB</sub> =-10V, f=1MHz	160typ	pF

\*hFE Rank ○(5000 to 12000), P(6500 to 20000), Y(15000 to 30000)

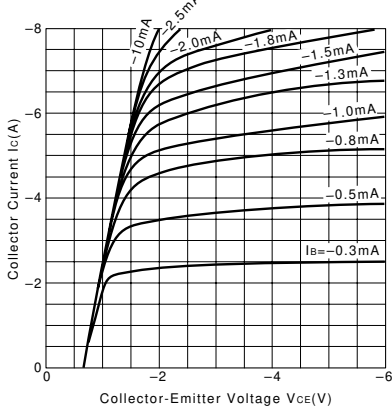
**External Dimensions FM100(TO3PF)**



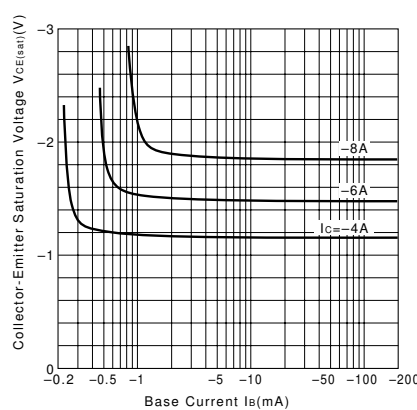
**Typical Switching Characteristics (Common Emitter)**

V <sub>CC</sub> (V)	R <sub>L</sub> (Ω)	I <sub>c</sub> (A)	V <sub>BB1</sub> (V)	V <sub>BB2</sub> (V)	I <sub>B1</sub> (mA)	I <sub>B2</sub> (mA)	t <sub>on</sub> (μs)	t <sub>stg</sub> (μs)	t <sub>f</sub> (μs)
-60	10	-6	-10	5	-6	6	0.7typ	3.6typ	0.9typ

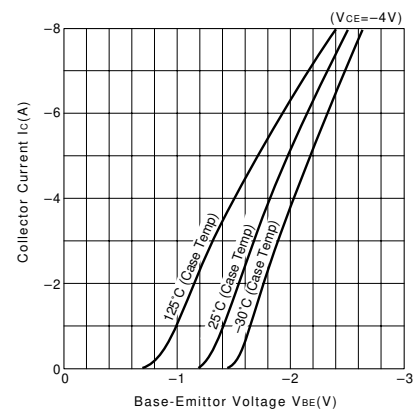
**I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)**



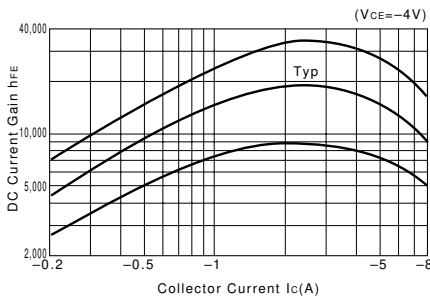
**V<sub>CE(sat)</sub>-I<sub>B</sub> Characteristics (Typical)**



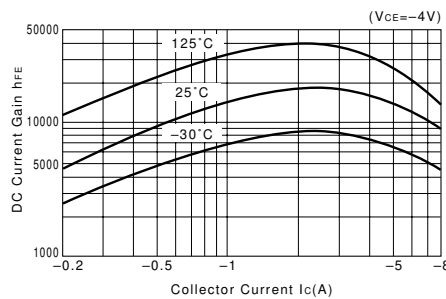
**I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)**



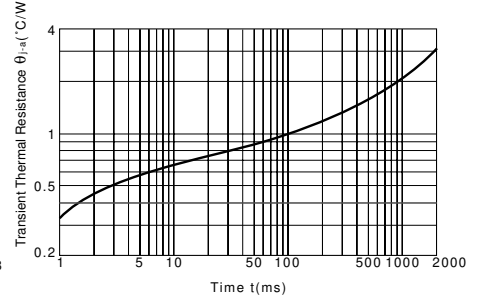
**hFE-I<sub>c</sub> Characteristics (Typical)**



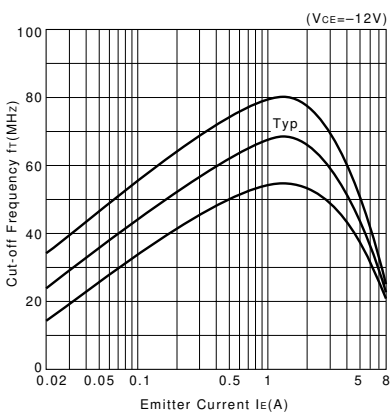
**hFE-I<sub>c</sub> Temperature Characteristics (Typical)**



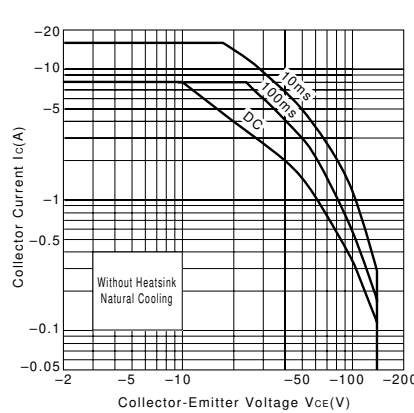
**θ<sub>J-a</sub>-t Characteristics**



**f<sub>T</sub>-I<sub>E</sub> Characteristics (Typical)**



**Safe Operating Area (Single Pulse)**



**P<sub>c</sub>-T<sub>a</sub> Derating**

